Chemical and Biological Defense Information Analysis Center
CBIAC NEWSLETTER
Serving the CB Defense Community
Summer 1998 Vol.4 No.3
A U.S. Department of Defense Information Analysis Center (IAC) sponsored by the Defense Technical Information Center (DTIC)

Friel Transfers CBDCOM Command Responsibility to Doesburg

Major General George E. Friel transfers command of the U.S. Army Chemical and Biological Defense Command (CBDCOM) to his successor as he retires after 38 years of military service.

Major General John C. Doesburg, became the new commander of the U.S. Army Chemical and Biological Defense Command (CBDCOM) on July 2, 1998.

On July 2, 1998, during a ceremony held at McBride Parade Field, Edgewood Area of Aberdeen Proving Ground, Maryland, Major General George E. Friel transferred command responsibility for the U.S. Army Chemical and Biological Defense Command (CBDCOM) to Major General John C. Doesburg. General Johnnie E. Wilson, commander of the U.S. Army Materiel Command, presided over the event, which also included Doesburg's promotion to major general, and Friel's retirement after 38 years of military service.

Friel assumed command of CBDCOM in 1992. Since then, CBDCOM has redefined itself, and is now recognized as a center of excellence in chemical and biological defense matters. Along with expanded responsibilities in defense, research, development, and acquisition, CBDCOM now leads efforts in chemical weapons storage; remediation; treaty compliance; emergency preparedness and demilitarization at the eight storage sites across the nation; and the domestic preparedness training, exercises and response in cities throughout the U.S. In progress at this time is the merger of CBDCOM and Soldier Systems Command (SSCOM) in Natick, Massachusetts.

During his 38 years of military service, Friel's command and staff positions have taken him to many locations throughout the world: Commanding General, 59th Ordnance Brigade, Pirmesens, Germany; Chief, Nuclear Chemical Division, Office of the Deputy Chief of Staff, Headquarters, U.S. Army Europe; Commander, 101st Ordnance Battalion, VII U.S. Corps; and Commander, Miesau Army Depot, Germany. Other assignments took him to the U.S. Army Materiel Command Headquarters in Alexandria, Virginia; Fort McClellan, Alabama; the Republic of Vietnam; Fort Benning, Georgia; Picatinny Arsenal, New Jersey; and Headquarters, Department of the Army. Friel and his wife Audrey have relocated to his home state, West Virginia.

While acknowledging the tremendous changes that have taken place under Friel's leadership, the changes that are in progress as Doesburg takes command are highly visible. Most significant at this time is the merger of SSCOM and CBDCOM to form the Soldier and Biological Chemical Command.

See "**Friel Transfers CBDCOM Command Responsibility to Doesburg**"

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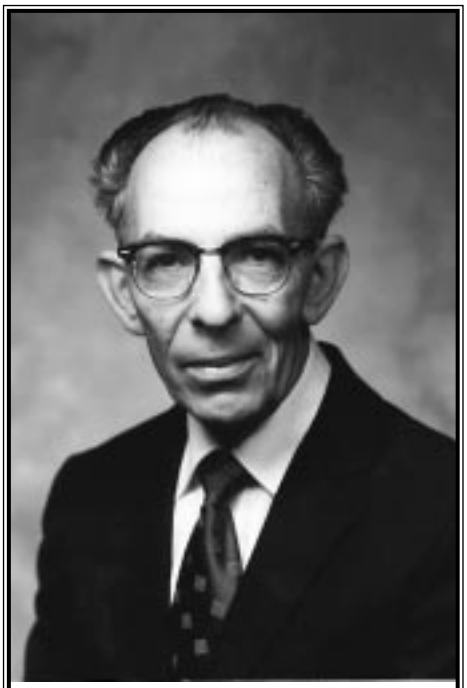
On the Inside

In Memorium



Thomas R. Dashiell
1927-1998

Mr. Thomas Ronald Dashiell, highly respected by the chemical and biological (CB) defense community for his knowledge and expertise in CB defense matters, died of leukemia, Sunday, May 3, 1998 at Frederick Memorial Hospital. He was seventy years old. His lifetime and career allowed him to witness history in the making.

Mr. Dashiell was born September 9, 1927, in Riverton, Maryland. After high school graduation, he enrolled at Western Maryland College in Westminster, Maryland. However, his college plans were put on hold a year later, when he was drafted into the Army Air Forces. Following his discharge after service in the Phillipines, he returned to Western Maryland College and received a Bachelor of Science Degree in Biology in 1950. He later attended the Johns Hopkins University and received a Bachelor of Science degree in Chemical Engineering in 1962.

In 1950, Mr. Dashiell began his government career at Fort Detrick, Maryland as a microbiologist. During his years at Fort Detrick, he held numerous positions of increasing responsibility, culminating in his appointment as the Assistant Scientific Director for Development and Engineering. In 1969, the program was severely curtailed by Presidential Order and he became the principal manager for the demilitarization and destruction of the biological stockpiles. He was the recipient of the Department of the Army Special Service Award and the Meritorious Civilian Service Award for this effort as well as being the first recipient of the Rawson Memorial Engineering Award.

Mr. Dashiell transferred to the Office of the Secretary of Defense in 1970, where he served as the Staff Specialist for Chemical Technology. He served as the primary representative of the Secretary of Defense on chemical warfare and chemical and biological defense programs. While in this position he initiated a comprehensive research and development program in environmental quality and biotechnology which encompassed the entire Department of Defense.

In 1984, he became the Director of Environmental and Life Sciences in the Office of the Director of Defense Research and Engineering where he provided policy guidance and program direction in the areas of Medical and Life Sciences, Training and Personnel Technology and Atmospheric Sciences. He continued to actively manage the Chemical and Biological Defense Programs and the Environmental Quality and Biotechnology programs. While in the Office of the Secretary of Defense, he participated in a number of national boards and panels including liaison to the National Academy of Sciences and the Federal Coordinating Committee on Science and Technology. He served as the Washington Deputy to the Technical Cooperation Program (TCCP), the military technology committee supported by the United States, the United Kingdom, Australia, Canada and New Zealand. He served as the OSD liaison to the NATO Military Committee and chaired or led a number of international negotiating sessions in Geneva and elsewhere on analytical technology and compliance concerns in both the chemical and biological areas. While in this position, Mr. Dashiell received a Presidential Meritorious Executive Award for his accomplishments.

Following his retirement from the Department of Defense in 1988, Mr. Dashiell served as a technical adviser to the U.S. Arms Control and Disarmament Agency as well as a consultant to a number of industrial firms on chemical and biological defense matters, technology transfer and biotechnology. He continued to actively participate in international negotiations and led several panels on both the Chemical Weapons Convention and the Biological Weapons Convention to increase openness and transparency and improve compliance with the treaties.

Mr. Dashiell is the author of more than twenty technical publications, and is listed in *Who's Who in Engineering, Who's Who in the South, Who's Who in Maryland* and *Who's Who in Science and Engineering*. He was a member of the American Institute of Chemical Engineers, the American Chemical Society, the American Society for Microbiology, the American Association for the Advancement of Science, the New York Academy of Science, Sigma XI and the American Defense Preparedness Association. In addition, he was a member of American Legion Post 11 and VFW Post 3285.

Tom was a member of Calvary United Methodist Church in Frederick, Maryland. He is survived by his wife, Mrs. Virginia T. Dashiell, his sister Evelyn D. Styles, one son, Thomas M. Dashiell and wife Nancy of Yorktown, Virginia, and one daughter, Tina D. Roth and husband Michael of Warrenton, Virginia, and two grandchildren Christopher T. Dashiell and Tracy L. Dashiell.

Memorial contributions may be made to Calvary Methodist Church, theTraumatic Brain Injury Society, the Multiple Sclerosis Society, and/or the American Red Cross.

Tom will be greatly missed by all who had the privilege of working with him.

Editors note: *Mrs. Dashiell sent a personal note along with the details about Tom's career, noting that when Tom died, they were one year short of celebrating their 50th wedding anniversary. In her letter, she shared the challenges that their family faced over the years, and the significance of each of the previously named organizations to which readers can send memorial donations.*

CBIAC Helps Improve the Navy's CBRD Training

"The paper-based system currently used to manage the Navy's curriculum development process is...inefficient. By creatively using a number of computer-based tools - by working with bits and bytes and electrons versus working only with paper - we significantly improved not only the quality of the CBRD training offered by the Naval Construction Training Center Detachment, but we did so in a timely and cost-effective manner."

- LCDR Jim Richardson, Officer in Charge, NCTCD

Introduction. The Naval Construction Training Center Detachment (NCTCD) is home to the Navy's Chemical, Biological, Radiological Defense (CBR-D) Operation and Training Specialist and Disaster Preparedness Operations Specialist courses. The school is located at the U.S. Army Chemical School, at Fort McClellan, Alabama, and is a component of the Joint Service "NBC Center of Excellence."

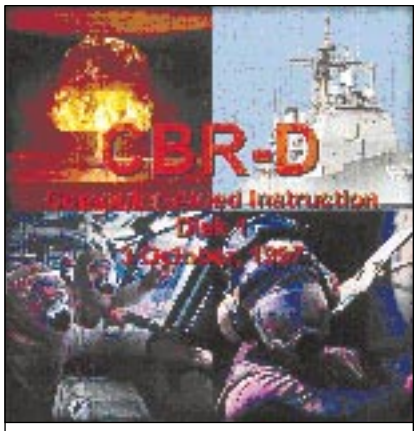


FIGURE 1: CBR-D CD-ROM

For several years, the CBIAC has been working to improve warfighter readiness through a number of Technical Area Tasks that focus on training modernization. This article presents an overview of progress made under CBIAC TAT 188 entitled: *Naval Construction Training Center Detachment Chemical, Biological, Radiological Defense Training Analysis, Program Development, and Implementation Support.* It is intended to recap the progress made within NCTCD and to identify the training modernization challenges that still lay ahead.

Project Scope. In recognition of the need to provide cost-effective CBRD training, the NCTCD initiated a training modernization program that incorporates the following approach characteristics:

- Greater utilization of computer-based training (CBT) tools and methods (*See Figure 1)*;
- Increased levels of hands on interactivity;
- Increased use of media rich content and formats;
- Higher connectivity via the Internet and World Wide Web; and
- Improved configuration management of training materials.

Approach. A structured integrated systems analysis two phased approach was utilized.

Phase I: Research and Review

- A comprehensive review of the baseline courses was performed. Course mission, learning objectives, lesson topics, training processes, and procedures, curriculum format, content, and presentation were all examined.
- Documented CBR-D operational readiness issues and deficiencies were analyzed.
- Up-to-Date training and education philosophies as well as current trends emerging within the military were surveyed.
- State-of-the-Art software, and hardware tools, audio/visual, presentation, and support equipment were tested.

Phase II: Analysis and Concept Development

- Information gaps, inaccuracies, and areas of improvement were identified.
- A Navy CBR-D "Training Concept and Future Vision" was developed to resolve operational readiness issues, deficiencies, and training inadequacies.
- Training environment, tools, and processes were then revamped to improve the quality of training.

Both the quantity and quality of the CBRD training were examined by an integrated process improvement team comprised of both government and contractor subject matter experts. This team used a number of computer-based decision support and collaborative tools which greatly enhanced the success of the final pilot course assessment process.

Accomplishments. The NCTCD initiated a number of training innovations by using the technical information found in the CBIAC and placing this information with instructors and evaluators who have practical operational experience.

Project highlights include:

- The incorporation of multi-media slides, video, and operational simulation presentations coupled with realistic hands-on exercises using actual equipment. Such equipment includes a mobile command and control center, an F18 air craft, and the Interim Biological Agent Detector (IBAD) and Improved Point Detection System (IPDS) mockups. Such realism supports the "we fight as we train" axiom. *(See Figures 2 and 3)*.
- Increased computer literacy and awareness of the cadre assigned to the NCTCD.
- Centralized storage, quality assurance, and internet web page fleet connectivity to/from the NCTCD guarantees that the correct CBRD information is being presented to the sailors afloat.

FIGURE 2:
COMMAND AND CONTROL TRAILER ADDS REALISM TO CBRD TRAINING.

FIGURE 3:
F-18 USED FOR CB TRAINING

Direct Savings. The CBRD course was shortened in length by three training days which led to overall savings that equates to five days per diem per student.

Indirect Savings. The shortening of the Shipboard course to ten days now allows for the participation of reservists who previously could not fit the course into their reserve duty schedule. Additional savings can be realized as a result of course material being

See **"CBIAC Helps Improve the Navy's CBRD Training"**

Continued on page 12

ONGOING AND RECENT ACTIVITIES

Current Awareness and Promotions

Representatives from the CBIAC attended, briefed and /or staffed our display at the conferences listed below:

• **1998 Joint Service Chemical & Biological Decontamination Conference**, June 9-11, 1998, at the St. Petersburg Bayfront Hilton, in St. Petersburg, Florida. The CBIAC display highlighted TAT work being done for Wide Area and Sensitive Equipment Decontamination programs, along with CBIAC products and services.

• **Defense Special Weapons Agency (DSWA)'s International Conference on Controlling Arms**, at the Wyndam Franklin Plaza Hotel, in Philadelphia, Pennsylvania, June 8-11, 1998. TAT work being done in support of DSWA's Arms Control program was on display at the CBIAC booth.

• **Worldwide Chemical Conference**, June 23-25, 1998, at Fort McClellan, Alabama. Along with the CBIAC products and services relevant to warfighter support, CBIAC TAT work in support of the chemical warfare aspects of the Theatre Defense Missile (TMD) program was highlighted on our display.

The CBIAC co-sponsored the **Federal Emergency Management Agency (FEMA) 1998 Technology Partnerships For Emergency Management Workshop and Exhibition**, July 20-23, 1998 at Argonne National laboratory in Argonne, Illinois. The CBIAC display included TAT work being done in support of domestic/emergency preparedness programs for CBDCOM and CSEPP.

CBIAC products and services will be featured as part of a larger display at the **Combined Army Preventive Medicine Conference, "Meeting the Force Health Protection Challenge"**, being held August 24-28, 1998 at the Hyatt Regency Crown Center in Kansas City, Missouri. This conference is sponsored by the Army Medical Department and hosted by the U.S. Army Center for Health Promotion and Preventive Medicine (USACHPPM).

Inquiry and Referral Services

Last quarter, nine percent of the inquiries were in the area of *Individual and Collective Protection*, as well as in the area of *NBC Survivability*. The pie chart below shows the agency sources for inquiries during third quarter, FY98.

Products

The CBIAC anticipates announcing several new products next quarter. Look for the announcements on our website and in the Fall '98 issue of the *CBIAC Newsletter.*

Technical Area Tasks (TATs)

Since the last newsletter, 14 new tasks were awarded, effort was added to 21 ongoing tasks, and 6 tasks have been completed. As of 30 June 1998, a total of 173 TATs have been awarded. Total value of TATs awarded is over 75 million dollars.

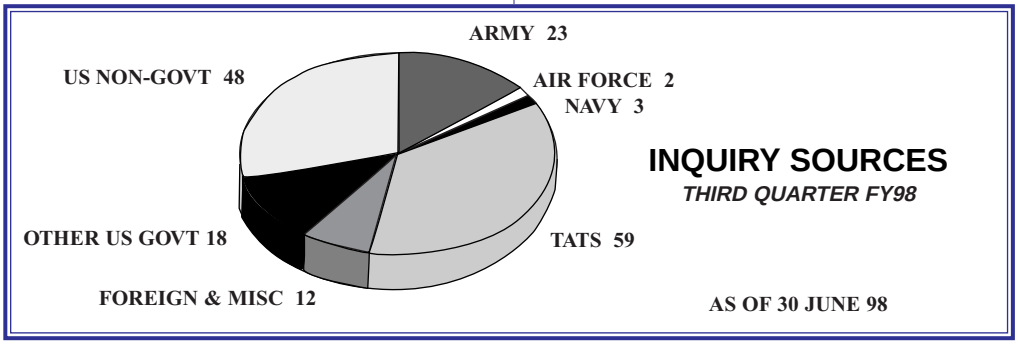
For further information on a CBIAC TAT, contact Judith Shetterly, CBIAC TAT Administrator. In order for us to help you most efficiently, please furnish your Government Contract Number (if any), the reason you are requesting the information, and your organization's address and telephone number. This information is needed in order to obtain the release of information from the TAT sponsor.

Completed:

TASK	DESCRIPTION/SPONSOR
3	Technical Support For ERDEC Conferences USA/ERDEC
7	CB Defense Master Plan For Aviation USN/NAWC
9	USN CBR-D Requirements Analysis and Technology Assessment USN/NAVSEA
147	Technical Support To OASD (C/BM) OSD/C/BM
231	Joint Future Operational Capabilities (JFOCS) Development Support USA/CMLS
262	Support CB Panels For Non-Proliferation Advisory Council OSD (AE)(CBM)

Underway:

TASK	DESCRIPTION/SPONSOR
317	Characterization of Fog Oil and Fog Oil Smoke USA/PM Smoke
327	Programmatic and Technical Support for the ERDEC Technical Support Working Group (TSWG) USA/ERDEC
328	Technical Support for Joint Servcice CB Decontamination Program USA/CBDCOM
334	Chemical and Biological Agent Thermal Kill Characterization DSWA
337	Smoke and Obscurant Evaluation Support for ASM USA/ERDEC
343	Worldwide Knowledge Base of Agents of Biological Origin DSWA
344	NBC Defense Joint Service Integration Group Technical Support USA/CMLS
345	Weapons of Mass Destruction Force Protection Domestic Preparedness Assessment USA/ERDEC
345	Weapons of Mass Destruction Force Protection Training USA/CMLS
353	PM Smoke Programmatic and Management Support Services USA/PM Smoke
366	Studies and Analysis Support to ERDEC Decontamination Program USA/ERDEC
368	Establishment of a Bio-level 3 Facility at ERDEC USA/ERDEC
375	Studies and Analysis and Programmatic and Management Support USA/ERDEC



CB NEWS EXCERPTS

The CBIAC has compiled a list of related CB news articles and taken excerpts from them to create brief overviews. The CBIAC does not provide secondary distribution of articles, but we can provide directions on where to find an article of interest. For further information, contact Mary Frances Tracy (tracymf@battelle.org) at (410) 612-6417.

Remarks by President Bill Clinton at the United States Naval Academy Commencement, **http://library.whitehouse.gov/PressReleases.cgi?date=0&briefing=5,** 22 May 1998. When President Bill Clinton spoke before the graduating midshipmen of the United States Naval Academy, he took the opportunity to announce three new initiatives that will require the concerted efforts of a whole range of federal agencies under a National Coordinator for Security, Infrastructure, Protection, and Counterterrorism. These initiatives are directed at 1) combating terrorism, 2) confronting potential threats from terrorists and hostile nations against computer networks and other critical technologies, and 3) dealing with biological weapons attacks. According to President Clinton, the approach would be as follows: "First, we will use our new integrated approach to intensify the fight against all forms of terrorism - to capture terrorists, no matter where they hide; to work with other nations to eliminate terrorist sanctuaries overseas; to respond rapidly and effectively to protect Americans from terrorism at home and abroad. Second, we will launch a comprehensive plan to detect, deter, and defend against attacks on our critical infrastructures - our power systems, water supplies, police, fire, and medical services, telephone systems, and computer networks. Third, we will undertake a concerted effort to prevent the spread and use of biological weapons, and to protect our people in the event these terrible weapons are ever unleashed by a rogue state, a terrorist group or an international criminal organization." Following these steps, President Clinton continued his focus on the fight against biological weapons. He stated a major priority would be to strengthen the Biological Weapons Convention with a strong system of inspections to detect and prevent cheating. Additionally, the President restated the plan to inoculate all Armed Forces against the anthrax bacteria. In conclusion, President Clinton pursued the need to protect the civilian population from biological weapons. This objective was being accomplished by having the Department of Defense (DoD) teach state and local officials to respond to the use of biological weapons. The President took this training one step further by saying that the DoD would be announcing plans to train National Guard and reserve elements in every region to address the challenge when biological weapons are used.

Starr, Barbara. *ACTD: a nearterm solution,* **Jane's Defence Industry Report**, April 1998. The U. S. Department of Defense (DoD) has developed the Advanced Concept Technology Demonstration (ACTD) program, which is the partial nearterm solution to providing a counterproliferation capability to locate and destroy chemical and biological weapons. The ACTDs are designed to work with the commanders-in-chief (CINCs) to provide "leave-behind" equipment for use by the CINCs upon completion of field testing of the equipment. The Counter Proliferation (CP) ACTD closes in on the enemy by providing advanced targeting technologies using battlefield surveillance and other intelligence gathering tools; planning tools for attacks to prohibit or destroy chemical and biological weapons; weapons for carrying out strikes; and battle damage assessment technologies. The CP ACTD was developed in two phases with the first phase nearly completed. This was accomplished by the development of the Hard Target Smart Fuze (HTSF). The HTSF is able to detect and determine or "count" voids in underground structures and detonate at programmed points. This first phase also conducted test firing on surrogate targets designed to be chemical facilities above ground. The second phase of the CP ACTD is scheduled for the timeframe of FY99 to FY02. Building upon the accomplishments of phase one, phase two will concentrate on the advanced capabilities of depth penetration, smart fuzing and collateral effects prediction.

Report: Tests show Iraq used nerve gas in warheads, **http://www.cnn.com/World/meast/9806/23/iraq.warheads.ap/**, 23 June 1998. The Washington Post has reported the warhead fragments recovered by United Nations (UN) weapons inspectors indicates the use of nerve gas in missile warheads by Iraq before the Gulf War. The report indicates the warhead samples were taken from a pit at Taji, Iraq, during March. Although only a few drops of nerve agent are necessary to kill humans within minutes, the analysis performed at Aberdeen Proving Ground found significant amounts of VX disulfide and a stabilizer. The lab report confirms the long-held concerns that Iraq had made weapons with VX gas. Iraq originally denied to the United Nations that it had not produced any of the deadly nerve agent, but when pressed, Iraq admitted to producing 3.9 tons of VX. According to the Washington Post, Republican congressional leaders have sent a letter to President Clinton, demanding whether President Clinton would support Chief UN weapons inspector Richard Butler in a confrontation with Iraq.

Hewish, Mark and Lok, Joris Jannssen. *Air forces face up to NBC reality,* **Jane's International Defense Review,** May 1998. During the Cold War, NATO air forces were generally well prepared for the nuclear, biological, and chemical (NBC) threat posed by the former Warsaw Pact. Their main operating bases featured collective protection (COLPRO) shelters, at least for the key operations personnel. Ground crews practiced regularly in NBC protective gear while being able to seek shelter in protected rest-and-relief COLPRO areas. Today, Iraq's hidden chemical and biological (CB) weapons stockpile serves as proof that the NBC threat to air operations has not gone away. Planners in NATO countries believe that the main CB threat to forward operating bases is from theater ballistic missiles (TBMs) which are most likely to be fired in salvos for maximum contamination, or from sporadic attacks by aircraft which can deliver larger payloads with greater accuracy. NATO has reacted to the need for NBC protection of bare-base air operations by establishing requirements for both individual aircrew protection and COLPRO technologies that are designed to support forward deployments. The alliance has devolved responsibility to individual countries to implement these requirements, and to develop and/or procure the necessary equipment.

***See* "CB News Excerpts"**

continued on page 11

NEW ACQUISITIONS

The following acquisitions may be reviewed at the CBIAC. Further information on how to obtain or review any of the listed acquisitions is included for your convenience. If you would like further detail, please contact Richard M. Gilman (gilman@battelle.org) at 410-612-6415. The CBIAC is not authorized to distribute duplicates of the listed acquisitions.

Croddy, Eric, ed. **Chemical and Biological Warfare: An Annotated Bibliography.** Lanham, Maryland: Scarecrow Press, 1997, pp. 429.

Contains nearly 2200 annotated, bibliographic citations for books, articles and other information resources dealing with chemical and/or biological warfare-related issues. The annotations are arranged into twenty-four subject categories. These include "Chemical and Biological Warfare in Past and Modern History;" "Restraint, Deterrence, and Chemical Warfare: World War II;" "Biological Warfare;" "Protection Measures and Equipment;" "Decontamination and Casualty Management;" "U.S. CBW Defense Policy;" "CBW and Civil Defense;" "CBW: Combat Operations;" "Disposal of Chemical Weapons;" "CBW in the Former Soviet Union;" "CBW in the Middle East;" and "Internet Resources." Appendix I lists approximately two dozen CBW-related periodicals and databases and Appendix II lists the counties which ratified the CWC through the end of 1996. Also includes, author and subject indices.

CB-104495.01
ISBN 0-8108-3271-2
(Hardcover edition)
Scarecrow Press, Inc.
4720 Boston Way
Lanham, Maryland 20706
(301) 459-3366

Price, Richard M. **The Chemical Weapons Taboo.** Ithaca, New York: Cornell University Press, 1977, pp. 223.

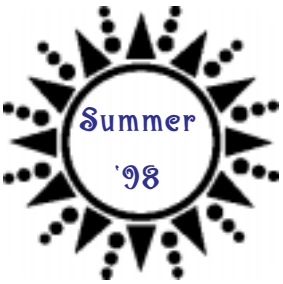
The author seeks to discover the reasons for the special abhorence associated with chemical weapons: "How is it that among the countless cruel technological innovations in weaponry of humankind, chemical weapons stand out as a weapon that has come to be stigmatized as morally illegitimate? Why do we think differently about chemical weapons?" To answer this question Professor Price explores a wide sweep of military, diplomatic and political history spanning the centuries from the Roman abhorence of poison-tipped spears to the Gulf War.

CB-104735.01
D755264
ISBN 0-8014-3306-1
(Hardcover edition)
Cornell University Press
Sage House
512 East State Street
Ithaca, New York 14850
(607) 277-2211

Stock, Thomas and Karlheinz Lohs. **The Challenge of Old Chemical Munitions and Toxic Armament Sites: SIPRI Chemical & Biological Warfare Studies, no. 16.** Oxford: Stockholm International Peace Research Institute (SIPRI), 1997, pp. 337.

"In this study...20 experts from 10 countries analyse the feasibility of detecting, locating, handling, transporting, storing and disposing of old chemical munitions and toxic armament wastes. Their history, physical and chemical properties, options for dealing with them and data on destruction technology are presented." Includes 57 tables and 24 figures.

CB-104736
D755265
ISBN 0-19-829190-6
(softcover edition)
Oxford University Press
2001 Evans Road
Cary, NC 27513
1-800-451-7556



"Friel Transfers CBDCOM Command Responsibility to Doesburg"

Continued from page 1

Doesburg, CBDCOM's new Commander, was born in Milwaukee, Wisconsin, and graduated from the University of Oklahoma with an ROTC commission. He comes to CBDCOM with 28 years of military service and experience. His previous assignments include: Battery Executive Officer, A Battery, 1st Battalion, 10th Field Artillery; Brigade Chemical Officer and later Commander, Headquarters Company, 2nd Brigade, 82nd Airborne Division; Commander, 21st Chemical Company, 82nd Airborne Division; Career Program Manager, MILPERCEN; Member of the U.S. Negotiation Team for a Chemical Weapons Treaty, U.S. Arms Control and Disarmament Agency; Executive Officer, U.S. Army Chemical Activity, Western Command (Johnston Island); Division Chemical Officer, 25th Infantry Division (Light); Commander, 84th Chemical Battalion; Commander, U.S. Army Chemical Activity, Pacific; and Chief, Chemical and NBC Defense Division, Office of the Deputy Chief of Staff for Operations and Plans, Headquarters, DA. Prior to assuming the position as Commander, CBDCOM, Doesburg held the position of Joint Program Manager, Joint Program Office for Biological Defense.

Doesburg, along with his wife, Denise, and sons, Sean and Russell, have moved to the Edgewood Area Aberdeen Proving Ground, Maryland.

DTIC and the CBIAC wish Major General Friel and his wife, Audrey, good health and continued prosperity and success in their retirement years, and extend a warm welcome to Major General Doesburg and his family.

For details of the change of command ceremony, see *End of An Era*, by the CBDCOM Public Affairs Office, **APG News,** Vol. 41, No.27, July 9, 1998. Additional information about CBDCOM can also be obtained on the CBDCOM website at **http://www.cbdcom.apgea.army.mil**

CALENDAR OF EVENTS

The CBIAC maintains a Calendar of Events highlighting conferences, symposia, meetings, exhibitions and workshops of interest to the CB community in every issue of our newsletter and on the CBIAC homepage at <http://www.cbiac.apgea.army.mil>. We invite CBIAC users to submit information on various events to Judith A. Hermann (hermannj@battelle.org) at 410-612-6421. Due to space limitations, the CBIAC will accept submissions on a first-come, first-served basis and reserves the right to reject submissions.

1998 MEETINGS

August 24-28
Annual Wargame
Newport, RI
Contact(s): National Defense Industrial Association (NDIA)
2111 Wilson Boulevard, Suite 400
Arlington, Virginia 22201
POC: Jean Kohlmeyer
Tel: (703) 522-1820 Fax: (703) 522-1885
E-mail: jkohlmeyer@ndia.org
URL http://www.ndia.org/events/brochure/824a/824areg.htm

August 24-28
Combined Army Preventive Medicine Conference "Meeting the Force Health Protection Challenge"
Hyatt Regency Crown Center
Kansas City, MO
Sponsor: Army Medical Department
Host: U.S. Army Center for Health Promotion & Preventive Medicine (USACHPPM)
Blackhawk Road
APG Edgewood Area, MD 21010-5422
POC: Ms. Doris Knapp
Tel: (410) 671-8139 or DSN 584-8139
Fax: (410) 671-8197
E-mail: doris_knapp@chppm-ccmail.apgea.army.mil
URL:http://chppm-www.apgea.army.mil/trng/datepage.htm

August 25-28
Third Annual Joint Service Pollution Prevention Conference and Exhibition "Achieving Compliance Through Pollution Prevention"
Henry B. Gonzalez Convention Center
San Antonio, TX
Contact(s): Headquarters Air Force Center for Environmental Excellence
Supported by: National Defense Industrial Association (NDIA)
2111 Wilson Boulevard, Suite 400
Arlington, VA 22201-3061
Meeting Reference: #840
POC: Peter Carellas
Tel: (703) 247-2593 Fax: (703) 522-1885
E-mail: pcarellas@ndia.org
URL:http://websrv.er.doe.gov/epic/html/calendar.sph#980825

September 1-5
Xth International Symposium on Cholinergic Mechanisms
Palais des Congres D'Arcachon
Arcachon, France
Contact(s): The International Symposia on Cholinergic Mechanisms (ISCM)
Palais Des Congres D'Arcachon
33120 Arcachon, France
Tel: [33] 5 56 22 47 47 Fax: [33] 5 56 22 55 55
E-mail: palais.des.congres.arcachon@wanadoo.fr
POC: Dr. Jean Massouli
Tel: [33] 1 44 32 38 91 Fax: [33] 1 44 32 38 87
E-mail: jean.massoulie@biologie.ens.fr
(Please mention ISCM in the subject line of your message)
URL:http://meleze.ensam.inra.fr/ISCM.Arcachon/

September 9-11
Operational Requirements in Contaminated Environments
Cafe Royal
London, England
Contact(s): POC: Elaine Rogers
Tel: +44(0) 171 252 2222 Fax: +44(0) 171 252 2272

September 10 & 13
1st Congress for the Medical and Health Service Care of NBC Casualties
Athens, Greece
Sponsor: The Medical Directorate of Hellenic Air Force's General Staff (HAF/GS/MDIR)
Major Athanasios Konstantinou, MD
HAF-General Staff-Medical Directorate
Bureau for Operations- Planning-NBC Defense
Kanellopoulou St. 3- Holargos
Athens HELLAS
Fax: (GR)-1- 7781104
E-mail: likos@mail.hol.gr
U.S. Information: Tel: (301) 652-1900 Fax: (301) 652-7001
E-mail: EPAConference@scicomm.com
URL:http://www.nbcindustrygroup.com/index06.htm and http://www.nbc-med.org/conference/conference.html#medhealth

September 15 & 17
NBC Seminar - 2nd Annual
Domaine du Moulin de Vernegues Lamanon, France
Sponsor: the High Command of the French Armies
MGP Instruments
BP No 1
F-13113 LAMANON
A l'attn. de Mme Viviane Ely
POC: Mrs. Viviane Ely
Tel: +33 4 90 59 60 72 Fax: +33 4 90 59 55 18
URL:http://www.nbc-med.org/conference/conference.html#nbcsem

September 25-27
Special Wilton Park Conference on Chemical and Biological Weapons Disarmament: Achieving and Ensuring Compliance (WPS98/10)
Wiston Park Conference Centre
Steyning, West Sussex, UK
Sponsors: Chemical and Biological Arms Control Institute and Wilton Park Conference Administration, Wilton Park
Wiston House Conference Centre
Steyning, West Sussex BN44 3DZ
United Kingdom
POC: Heather Ingrey
Tel: (+44 1903) 817764 Fax: (+44 1903) 814217
E-mail: heather.ingrey@wiltonpark.org.uk

October 6-8
IIth International NBC Defence Symposium
Shrivenham, UK
Sponsor: NBC UK
Col (Retd) R G Lee
Director of International Symposia
Royal Military College of Science, Shrivenham
Swindon, Wiltshire SN6 8LA
United Kingdom
POC: Mrs. A Harrison
Tel: +44(0) 1793 785648 Fax: +44(0) 1793 785325
E-mail: a.harrison@rmcs.cranfield.ac.uk

October 12-14
AUSA Annual Meeting 1998
"Army XXI: Poised for the Future"
Washington, D.C.
Contact(s): Association of the United States (AUSA)
2425 Wilson Boulevard
Arlington, VA 22201
POC: Ms. Diane Fitzgerald
Tel: (703) 841-4300, ext. 661 or (800) 336-4570
Fax: (703) 243-2589
E-mail: dfitzgerald@ausa.org
URL:http://www.ausa.org/AUSA98/Welcome.html

October 14-16
Weapons of Mass Destruction & Domestic Preparedness: Policy Issues and Program Requiements
Washington, D.C.
Contact(s): Defense Week
Tel: (800) 926-5464
URL: http:www.kingpublishing.com/g-50.htm

October 19-21
DoD Science and Engineering Technology Symposium
Johns Hopkins Applied Physics Laboratory
Laurel, Maryland
Contact(s): National Defense Industrial Association (NDIA)
2111 Wilson Boulevard, Suite 400
Arlington, VA 22201-3061
POC: Shari Levine
Tel: (703) 247-2582 E-mail: slevine@ndia.org
URL:http://www.erols.com/nbcgroup/index06.htm

October 25-30
The Chemical and Biological Medical Treatment Symposium - Industry I (CBMTS-Ind I) "Eco-Terrorism: Chemical and Biological Warfare without Chemical and Biological Weapons"
Zagreb and Dubrovnik, Croatia
Hosted, organized and in part sponsored by:
The Ministry of Defense of Croatia and its
Department of NBC Defense
In partnership with: The CBMTS International Organization
and Applied Science and Analysis Inc. (ASA)
PO Box 17533
Portland, Maine 04112-8533
ASA POC: Richard Price at CBMTS-Industry I
Tel: (207) 829-6376 Fax: (207) 829-3040
E-mail: asa@ime.net
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at CBMTS -Industry I
Tel: 385145 51 513 Fax: 385146 13 300
E-mail: cbmts_hr@zvonimir.morh.tel.hr
URL:http://www.asanltr.com/cbmts.html

October 26-30
The "Fourth Joint Workshop on Standoff Detection for Chemical and Biological Defense"
The Hospitality House
Williamsburg, VA
Organizers: The Joint Science and Technology Panel on
Chemical and Biological Defense (JSTPCBD)
in cooperation with: The U.S. Army, U.S. Navy, U.S. Air Force and U.S.
Marine Corps Science and Technology
ATTN: WSD'98
101 Research Drive
Hampton, Virginia 23666-1340 USA
POC: Ms. Sonya L. Herrin
Tel: (757) 865-7604, Ext. 37 Fax: (757) 865-8721
E-mail: herrin@stcnet.com
URL:http://www.stcnet.com/meetings/wsd98/

November 1-6
SPIE's 1998 Symposium on Industrial and Environmental Monitors and Biosensors
Hines Convention Center
Boston, MA
Contact(s): SPIE - The International Society for Optical
Engineering
Tel: (360) 676-3290 Fax: (360) 647-1445
E-mail: pe98call@spie.org
URL:http://www.spie.org/info/iemb/

November 2-5
DTIC 1998
Annual Users Meeting and Training Conference
DoubleTree Hotel
National Airport in Arlington, VA.
Contact(s): ATTN: DTIC-BCU (Conference Coordinator)
Defense Technical Information Center (DTIC)
8725 John J. Kingman Rd., Ste. 0944
Ft. Belvoir, VA 22060-6218
POC: Ms. Julia Foscue
Tel: (703) 767-8236 or DSN 427-8236
E-mail: jfoscue@dtic.mil
URL:http://www.dtic.mil/dtic/digest/
digest98-2/dtic98.html

November 17-20
Scientific Conference on Chemical and Biological Defense Research
Edgewood Area Conference Center
Aberdeen Proving Ground, MD
Contact(s): U.S. Army Edgewood Research, Development and
Engineering Center (ERDEC)
Aberdeen Proving Ground, Maryland 21010-5423
ERDEC POC: Ms. Dottie Berg
Tel: (410) 671-4883/4144 or DSN 584-4883/4144
Fax: (410) 671-2649
E-mail: dxberg@cbdcom.apgea.army.mil
URL: http://www.stcnet.com/meetings/erdec98.html

THE CANADIAN INTEGRATED BIO-CHEMICAL AGENT DETECTION SYSTEM (CIBADS)

When Canada decided to send troops to the Persian Gulf in 1990, the Defence Research Establishment Suffield (DRES) deployed a prototype system for detecting and identifying CB agents based on its ongoing research program. The Mobile Atmospheric Sampling and Identification System (MASIF) employed particle sizing and counting technology for detection and as the cue for collection of a liquid sample which was subsequently analyzed by a standard enzyme-linked immunosorbent assay. The system operated reliably for the duration of hostilities and gave the Canadian contingent confidence they would have adequate warning of a BW attack.

After hostilities ended, research continued at DRES on what was now known as the Canadian Integrated Bio-chemical Agent Detection System (CIBADS). To address the problem of false alarms, DRES worked with TSI Inc. (St. Paul, MN) and Dycor Inc. (Edmonton, AB) to develop the Fluorescence Aerodynamic Particle Sizer (FLAPS) which differentiates particles of biological origin from background. Incorporated into CIBADS as the detection module and cue for sample collection, FLAPS has greatly reduced the chance of a false alarm. Since the concept demonstrator performed extremely well in joint field trials (JFT II) held at Dugway Proving Ground (DPG) in 1995, a contract was awarded to Computing Devices Canada (CDC) to produce two advanced development models to be known as CIBADS II. As a prime contractor located in Calgary, AB, CDC has been able to work closely with DRES and its two main subcontractors, Dycor Inc and Scientific Instrumentation Ltd. of Saskatoon, SK.

The most recent version of CIBADS II underwent its latest round of field testing at DPG on October 1997 (JFT IV) and met all of its key performance requirements:

- detection of a biological or chemical threat in less than 15 seconds;
- biological agent identification in less than 30 minutes;
- collection of samples for verification analysis;
- automatic alarming and reporting in real-time; and
- demonstrated reliability (23/23 releases detected without any false alarms).

The CIBADS Sentry 2B Detector undergoing chamber trials at Defence Research Establishment Suffield in June, 1998

During JFT IV, the liquid samples collected by the large volume air sampler were analyzed using antibody-based test kits obtained from the Naval Medical Research Institute in Bethesda, MD. In the short term, Canada intends to purchase these kits from the U.S. supplier and to develop an automated ticket reader for integration into the current version of CIBADS. For the final version, DRES is working with CDC and the University of Alberta to develop an analytical method for agent identification based on capillary electrophoresis, one that does not require prior knowledge of the agents likely to be encountered. This analytical system for agent identification and the incorporation of a downwind hazard prediction model are among development items to be completed in the coming months. The total system will undergo re-engineering to significantly reduce size, weight and power requirements.

While the advanced development models will not be available until December 2000, the current version of CIBADS II has been deployed with the Canadian Forces on two occasions already. Last year, it was sent with the NBC Response Team to Vancouver, BC, for the Asian Pacific Economic Conference. This may have been the first time a CB detection system was deployed in a counter-terrorism role. In February 1998, CIBADS II was mounted on the deck of the HMCS Toronto when the ship was sent to the Persian Gulf as part of efforts to force Iraq to comply with UN inspection requirements. These deployments represents a valuable user trial which also builds confidence in the military that the system is reliable (over 1500 hours of operation without breakdown).

Those interested in further information on the CIBADS technology, including details of the Canadian experience at JFT IV, should contact Mr. Clement Laforce, Head of Business Development at DRES (403)-544-4733; e-mail: Clement.Laforce@dres.dnd.ca.

Highlight Your Chemical or Biological Defense Program in the CBIAC Newsletter!


CBIAC NEWSLETTER

Analysis and Validation: A Perspective for Hazard Models

On the Inside

The CBIAC Newsletter is a forum for the latest program updates, policy changes, and general Chemical and Biological Defense (CBD) information. We welcome unsolicited articles for inclusion in the newsletter.

Articles should be approximately 200 to 300 words in length. Graphics, and photographs greatly enhance the story presentation, and may be provided in electronic format (.bmp, .tiff, .gif, .jpeg). Hardcopies of photographs or "camera ready" art (clear, sharp lines) are also acceptable

Deadlines for submissions for each quarterly issue are listed below:

Winter issue: Dec. 1st
Spring issue: Mar. 1st
Summer issue: June 1st
Fall issue: Sept. 1st

Advance coordination is recommended, especially if you are interested in having your article appear in a particular issue.

Articles provided for the CBIAC Newsletter must be approved for public release prior to submission and are subject to the review and approval requirements established by our sponsor. The CBIAC reserves the right to reject submissions.

For further information, contact Mary Jo Waters, Newsletter Editor, at (410) 612-6418 or by E-mail at watersm@battelle.org.

SELECTED INQUIRY RESPONSES

This section of the newsletter contains selections of recent technical inquiries and responses on subjects we feel are of interest to our readers. The information presented has been edited to conserve space. If you would like further detail, contact Mary Frances Tracy (tracymf@battelle.org) at 410-612-6417. Please provide the reference number if available.

Q: Which websites post information on conferences related to Chemical and Biological (CB) defense?

A: There are several websites that post regularly updated lists of upcoming conferences, workshops and symposiums:

- **CBIAC Homepage**
http://www.cbiac.apgea.army.mil.
(Calendar of Events)

- **U. S. Army Chemical and Biological Defense Command (CBDCOM)**
http://www.cbdcom.apgea.army.mil/
(Publications)

- **NBC Industry Group**
http://www.nbcindustrygroup.com/
(Coming Events)

- **Medical Information NBC Information Server**
http://www.nbc-med.org/
(Conferences)

- **National Defense Industrial Association (NDIA)**
http://www.ndia.org/
(Events and Meetings)

- **Gordon Research Conferences**
http://www.grc.uri.edu/

Q: How can I obtain copies of documents that I find in database search results?

A: Obtaining document copies depends on several factors. If the document is available through the **Defense Technical Information Center (DTIC)** you can order documents directly from them once your organization has an established account with DTIC. Check their website at http://www.dtic.mil for further information about ordering documents or setting up an account, or call User Registration at (703) 767-8273 or Document Orders at (703) 767-8274. There is also a 24-Hour Ordering Service at 1-800-CAL-DTIC (225-3842).

The **National Technical Information Service (NTIS)** is another resource for ordering documents. If you are not eligible to register with DTIC, NTIS may be able to locate the documents for you. They have an interactive website at http://www.ntis.gov. If you cannot access their website, call (703) 605-6000 for further information.

If you have located a document citation through a CBIAC database search, and have difficulty obtaining a copy, call the CBIAC and our staff can provide assistance locating the appropriate contact for obtaining the document(s) of interest.

CBIAC STATISTICS
Third Quarter, FY98

Total CBIAC Documents accessible through DTIC DROLS: 8,698

Shared[1]: 4,975 Unique[2]: 3,723

Total Documents added to the CBIAC BD during Third Quarter, FY98: 645

Total Citations (without Documents) added to the CBIAC BD during Third Quarter, FY98: 105

Total Citations available through the CBIAC BD: 52,502

Total Documents on Site: 30,638

Total Inquiries received during Third Quarter, FY98: 165

Technical: 26
Bibliographic: 114
Informational: 22
Referral: 3

Total TATs awarded since contract initiation: 173

Completed: 67 Ongoing: 106

Total Newsletter subscribers: 2,536

1 Existing DTIC records appended with CBIAC terms.
2 New DTIC records created by the CBIAC

CONTRACT AWARDS

1. **OBA-4 Facepiece Lens**
Mine Safety Appliance Company
PO Box 428
Pittsburgh, PA 15230
$34,700.
Defense General Supply Center-Richmond

2. **Biological Warfare Defense Research Lady Davis Institute for Medical Research**
McGill University
Montreal, Quebec, Canada
$1,100,000. Sole Source
DARPA via SPAWAR Systems Center-Charleston

3. **Chemical Detection Tactical Dropsondes**
Tracor Aerospace
Austin, TX
Sole Source
FISC-Philadelphia

4. **Maintenance, Storage, Shipping, and Destruction of Medical Biological Defense Products under current good manufacturing practices (cGMP)**
The Salk Institute
Sole Source. April 1, 1998
Army-Medical Research Acquisition Activity

5. **M14 Protective Entrance**
Hunter Mfg.
30525 Aurora Road
Solon, OH 44139-2795
$527,742. June 16, 1998
By U.S. Army Armament and Chemical Acquisition and Logistics Activity

6. **Refurbishment of Detector Cooler and Interferometers**
Technical Products Group Inc.
Intellitec Division
2000 Brunswick Lane
Deland, FL 32724
$49,902. June 12, 1998
By U.S. Army Armament and Chemical Acquisition and Logistics Activity

7. **M273 Maintenance Kit**
Technical Products Group Inc.
Intellitec Division
2000 Brunswick Lane
Deland, FL 32724
$307,700. May 20, 1998
By U.S. Army Armament and Chemical Acquisition and Logistics Activity

8. **Chemical Barrier Skin Protective Compound**
Amjay Chemicals JV
11200 Westheimer
Suite 310
P.O. Box 218786
Houston, TX 77218-8786
$29,218. May 7, 1998
By Defense General Supply Center

Access to Secure STINET Easier
Full-Text Documents Now Available

If you need to locate Defense-related information any time of the day or night, Secure STINET, a DTIC Internet resource, can help. This service provides access to citations covering the last 13 years of DTIC's Technical Report collection, 5 years of active Technical Effort and Management System (TEAMS) summaries (formerly known as Work Unit Information System (WUIS) summaries), Research and Development Descriptive Summaries (FY 1995 through 1999), the popular "How To Get It" publication, and links to other pertinent sources.

The full-text of the most recent unclassified documents added to DTIC's technical report collection are also now available through Secure STINET! DTIC will be testing this enhancement for 6 months. During this test period, DTIC will be soliciting feedback from users of this exciting new feature. Your comments will help DTIC determine if it is useful to you and how it can be improved.

Secure STINET also provides access to the SwetScan database of the Canada Institute for Scientific and Technical Information (CISTI) and provides an electronic table of contents of journals and conference proceedings. You can save $550 per year in site license fees by accessing SwetScan through Secure STINET.

The subscription for Secure STINET service access is $50 per year/per subscriber. There are no additional on-line charges. Authorized users can register by contacting DTIC's Registration staff for your Secure STINET service application:

Mail: ATTN: DTIC-BCS (Registration Branch)
Defense Technical Information Center
8725 John J. Kingman Road, Suite 0944
Fort Belvoir, VA 22060-6218

Telephone: Commercial - (703) 767-8272, DSN - 427-8272
Toll Free - 1-800-225-3842 (menu selection 2, option 2)
Facsimile: Commercial - (703) 767-8228 DSN - 427-8228
Email: reghelp@dtic.mil
Internet: http://www.dtic.mil/stinet/registration.html

If you would like to subscribe to Secure STINET, but need a version of Netscape Navigator that supports the security required for viewing Secure STINET, it is available from DISA for free. Downloads are available at **www.disa.mil/enterprise_licens**e or from **http://home.netscape.com/download/** This software can be downloaded by DoD Government employees, DoD contractors working on-site at a DoD facility, or DoD contractors working at a non-DoD facility using DoD-furnished computers. For additional information on this licensing agreement, please call DISA DII Enterprise Licensing Hotline at 703-681-2088. Authorized DoD government and contractor employees not working on-site at DoD facilities must coordinate with DISA by sending an email request to **licenses@ ncr.disa.mil** to arrange for registration.

If you have any questions pertaining to Secure STINET service, contact Ms Maureen Malone at DTIC by telephone at (703) 767-8267/DSN 427-8267 or 1-800-225-3842 (menu selection 2, option 3) or via email at **bcporder@dtic.mil** or **mmalone@dtic.mil**.

CB News Excerpts

Continued from page 5

This article inventories some current approaches to the protection of aircrews and their environments when faced with a CB challenge. Portable COLPRO designs are based on inflatable tents or liners that either need to be covered with protective plastic to keep out liquid threats or placed inside existing buildings. They are equipped with filter equipment, and also use internal overpressure and airlocks to keep agents out. The article discusses and compares systems developed by companies in the UK, France, Sweden, and Norway to provide NBC-proofed accommodations and operations facilities. It also reviews the development of individual aircrew NBC protective equipment including protection suits from Germany, a pilot eye respiratory system (PERS) and a pneumatic-operated filtered air supply unit (POFASU) from Norway, and U.S. contributions to aircrew and ground-personnel protection, both individual and collective (the CWU-66/P Aircrew Chemical Defense Ensemble (ACE), the MBU-19/P Aircrew Eye/Respiratory Protection (AERP) effort, the Disposable Eye/Respiratory Protection (DERP) program, the Improved Toxological Agent Protection (ITAP) Ensemble, and the Joint Fire Fighter Integrated Response Ensemble (JFIRE) program). The capabilities of the Joint Biological Point Detection System (JBPDS), the Light Nuclear, Biological, and Chemical Reconnaissance System (LNBCRS), the Joint Chemical Agent Detector (JCAD), the Joint Service Lightweight Standoff Chemical Agent Detector (JSLSCAD), the Advanced Chemical Agent Detector/Alarm (ACADA), and the Joint Service Agent Water Monitor (JSAWM) to deal with the problems of detection and measurement of NBC contaminants are evaluated. Other key aspects of NBC protection for air operations which are addressed in this article concern the technology of enzyme-based catalytic decontamination of air bases, and the modifications to existing field hospitals necessary to maintain function in a CB environment.

"CBIAC Helps Improve the Navy's CBRD Training"

Continued from page 3

developed in standardized digital graphic and text formats. This forward compatibility of material allows for greater utilization of material in future course upgrades.

Warfighter capability. Readiness is an outcome of realistic training. The "combat bottom line" is, therefore, directly related to increased test scores, a decrease in the need for re-testing of students having difficulty with the course material, and/or an overall greater retention of knowledge by students returning to their ships. The CBRD pilot course scored well in each of these readiness indicators. Further study will be needed to validate the exact improvements made in knowledge retention.

Video clips - both in the VCR format and as QuickTime clips on CD-ROMs - add realism to training. Pictures are worth much more than a thousand words when it comes to preparing sailors for potential life threatening environments. For example, in preparing to enter a test chamber where live chemical agents are in use, simulations and videos lessen the uncertainty and anxiety of the students by enabling them to envision what's expected of them before they're faced with "combat situations." CBRD mission rehearsals and combat simulations are not too far off in the future.

Continuous improvement. The goal for the NCTCD remains ... continuous improvement of CBRD training to improve combat and peace keeping readiness with the intent to migrate schoolhouse expertise to the fleet via CBT-multimedia products.

Note that from the very start of this project, the Navy intended to periodically "raise the bar". Training modernization goals and objectives were chosen to provide a "maintenance or sustainment level" of CBRD readiness. Then, the Navy intended to provide a "ramp or surge" capability to meet full combat or peace keeping contingency need. As the "training bar" was raised, the government-contractor team reduced the "delta" or "readiness gap" between high-level combat readiness and the Navy's day-to-day sustainment level of preparedness.

Future Challenges. The single greatest challenge that lays ahead is the desire to produce high quality, multimedia products that sailors afloat can access via the Internet. This capability would put the NCTCD well on its way to the ultimate goal of building a "virtual classroom" environment for the Navy of the 21st Century.

The next challenge is to keep the Navy on track with the overall goal to migrate the detachment to Fort Leonard Wood, MO, in 1999.

The future holds significant promise to improve CBRD readiness. The cost-effective use of CBT tools and techniques will permit for pre-testing and self-paced instruction. CD-ROM based, interactive courseware (ICW) will serve as a way to improve training on board ship.

Refresher training will occur where it counts, at sea, on the deck plates. Gathering comments from the fleet, from schoolhouse instructors or focus groups, and from student graduates of this course are still tasks that lie ahead.

The recommended mix of computer-based training technology improvements, coupled with new training aids and devices, will establish the foundation for an improved CBRD classroom environment.

The lessons learned in Alabama have application to training challenges across the Navy. The aggressive use of CAI, ICW, and groupware tools should show similar savings in maintenance, damage control, and operational training environments.

The CBIAC TAT 188 team included Mssrs. Rob Etkins, Reggie Probst, Terry Lambert, John Lesko of Battelle, Mr. Peter Beck of Decision Technology and Mr. Robert Beard of Decision Support Services. For further information, contact Rob Etkins at (703) 413-8866 or by E-mail at etkinsr@battelle-cc.org.

Chemical and Biological Defense Information Analysis Center
CBIAC
Serving the CB Defense Community

The **CBIAC Newsletter** is a quarterly publication of the Chemical Warfare/Chemical and Biological Defense Information Analysis Center (CBIAC). The CBIAC is a Department of Defense (DoD) Information Analysis Center (IAC), administratively managed by the Defense Technical Information Center (DTIC) under the DoDIAC Program Office.

Government agencies and private industry under contract to the Department of Defense can contact the CBIAC for informational products and services. The CBIAC serves as the center for the acquisition, compilation, analysis and dissemination of information relevant to chemical warfare and chemical and biological defense technology.

The CBIAC is located in Building E3330, Aberdeen Proving Ground - Edgewood Area, Maryland 21010. For further assistance or information, visit or contact the CBIAC Monday through Friday from 8:00 a.m. to 4:00 p.m., EST:

Mailing Address: CBIAC
P.O. Box 196
Gunpowder Branch,
APG, MD 21010-0196

Tel: 410-676-9030 Fax: 410-676-9703
E-Mail: cbiac@battelle.org
URL: http://www.cbiac.apgea.army.mil/

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The Contracting Officer's Technical Representative for the CBIAC is Mr. Joseph D. Williams. He can be reached through his E-Mail address at jdwillia@cbdcom.apgea.army.mil or at the following address:

Technical Director, ERDEC
Attn: SCBRD-RTA (Mr. Joseph Williams)
APG-EA, MD 21010-5423

DTIC '98 Annual Users Meeting and Training Conference

Maintaining the Information Edge

This year DTIC is hosting its 25th Annual Users Meeting and Training Conference. The conference will be held at the DoubleTree Hotel National Airport, 300 Army Navy Drive, Arlington, VA, fom 2-5 November 1998. The agenda is packed full of exciting and relevant topics, as well as an exhibit room overflowing with vendors from every aspect of Information Technology (IT).

"Maintaining the Information Edge" is the theme for the conference, and the sessions are geared to this topic. DTIC '98 will address the information sources and changing technologies that impact those who are involved in Defense Research and Acquisition. This year's keynote speakers are Lieutenant General David J. Kelley, Director, Defense Information Systems Agency; Mr. Carol Cini, Associate Director, U.S. Government Printing Office; and Mr. Richard Luce, Director, Los Alamos Research Library. Mr. Louis Purnell, the luncheon speaker, will be relating his exploits during World War II as a Tuskeegee Airman.

The Conference offers four days of varied training sessions that enable DTIC users to collaborate on the latest IT topics. Presentations will address the most current issues effecting the research, development, and acquisition communities. Not only will these speakers acquaint you with the latest policy and operational developments, but they will also provide you with practical details on valuable and diverse domestic and foreign information resources, security issues, the World Wide Web, virtual libraries, video streaming and the storage and dissemination of electronic documents.

Maintaining the Information Edge presents exciting new challenges - DTIC '98 promises to provide the tools to expand your horizons to meet these challenges! For more information, please contact Ms. Julia Foscue, the DTIC '98 Conference Coordinator, or access the DTIC Homepage on the World Wide Web.

Comm: (703) 767-8236 E-mail: jfoscue@dtic.mil DTIC Homepage: http://www.dtic.mil

Please help us to update our newsletter mailing list!

The CBIAC Newsletter is posted in PDF format on the CBIAC homepage. Our mailing list for those requesting a hardcopy version of our newsletter is updated periodically. Please take a moment to notify us of any names that should be added or deleted from our mailing list, and provide any address corrections if you have relocated. Send your updated information to the attention of Barbara Hoffman, CBIAC Administrator, by fax, (410) 676-9703, mail or E-mail hoffmanb@battelle.org.

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Tel: _____ Fax: _____ E-mail: _____

The CBIAC Announces Price Cuts on Popular Products!!

Worldwide Chemical Detection Equipment Handbook **(HB-95-02)**
Was: $299.95
Now: $150.00

Chemical Warfare Agent Simulant Training Kit **(SIMKIT-96-01)**
Was: $300.00
Now: $150.00

Worldwide NBC Mask Handbook **(HB-92-01)**
Was: $ 99.95
Now: $ 75.00

Purchase Both Handbooks for $200.00

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